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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,393

02/13/2006

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21834 7590 11/12/2008
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EXAMINER

SCOTT, AMANDA L

ART UNIT

PAPER NUMBER

4185

MAIL DATE

DELIVERY MODE

11/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,393	Applicant(s) DESINGER ET AL.	
	Examiner AMANDA SCOTT	Art Unit 4185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the neutral electrode of **claim 9**, the ferromagnetic ring of **claim 11**, the shield or casing of **claims 12 and 13**, the mechanical switch from **claims 18 and 27**, and the electrical switch from **claims 16, 17, 23, 24, 25 and 26** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 22, 24, and 26 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. **Claim 22** states

the same limitation already disclosed in the independent claim 14: *the lines have a portion towards the generator and a portion towards the probe, between which is a*

switching device for separating and connecting the generator-end portion and the

probe-end portion. **Claim 24** states the same limitation as claim 16: *the switching device*

includes an electrical switch; both claims depend on the independent claim 14, claim 24

does not further limit the independent claim 14. **Claim 26** states the same limitation as

claim 17: *the electrical switch is a reed relay*; both claims depend on claim 14, there is

no further limitation of these claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 14, 16-19, 22, 24, and 26** are rejected under 35 U.S.C. 102(b) as being anticipated by D' Amelio et al. (US 4,823,791).

Regarding claim 14, D' Amelio et al discloses a high frequency application apparatus comprising a high frequency generator, a probe arrangement which is connected to the high frequency generator and which includes at least two electrodes, and at least two lines which connect the electrodes to the high frequency generator, characterized in that the lines have a portion towards the generator and a portion towards the probe (column 8, lines 9-34), between which is a switching device for separating and connecting the generator-end portion and the probe-end portion(column 15, lines 52-54).

Regarding claim 16, D' Amelio discloses a high frequency application apparatus characterized in that the switching device includes an electrical switch (column 8, lines 9-34; column 15, lines 52-54). It is inherent that a switch can turn off/on power to the probe. Any switch can perform this.

Regarding claim 17, D' Amelio discloses a high frequency application apparatus characterized in that the electrical switch is a reed relay(column 8, lines 9-34; column 15, lines 52-54). It is inherent that a switch can turn off/on power to the probe. Any switch can perform this.

Regarding claim 18, D' Amelio discloses a high frequency application apparatus characterized in that the switching device includes a mechanical switch. (column 8, lines 9-34; column 15, lines 52-54). It is inherent that a switch can turn off/on power to the probe. Any switch can perform this.

Regarding claim 19, D' Amelio discloses a high frequency application apparatus characterized in that the switching device includes a signal line and an actuating switch which are of such an arrangement and configuration that separation and connection can take place in the room in which the high frequency generator is disposed (column 14, lines 31-32; column 15, lines 52-54)).

Regarding claim 22, D'Amelio discloses a high frequency application apparatus wherein the lines have a portion towards the generator and a portion towards the probe, between which is a switching device for separating and connecting the generator-end portion and the probe-end portion (column 15, lines 52-54).

Regarding claim 24, D' Amelio discloses a high frequency application apparatus characterized in that the switching device includes an electrical switch (column 8, lines 9-34; column 15, lines 52-54). It is inherent that a switch can turn off/on power to the probe. Any switch can perform this.

Regarding claim 26, D' Amelio discloses a high frequency application apparatus characterized in that the electrical switch is a reed relay(column 8, lines 9-34; column 15, lines 52-54). It is inherent that a switch can turn off/on power to the probe. Any switch can perform this.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-3, 6-8, 12-13, and 15** rejected under 35 U.S.C. 102(e) as being anticipated by Berube et al. (US 6,471,696 B1).

Regarding claim 1, Berube et al. discloses a high frequency application apparatus comprising a high frequency generator, a probe arrangement which is connected to the high frequency generator and which includes at least two electrodes (view figure 2, (102 /104)), and at least two lines which connect the electrodes to the high frequency generator, characterized in that the lines are combined together in a common cable and extend in mutually parallel relationship at least over a part of the length of the cable at a defined spacing which is between 1 mm and 25 mm (view figure 2, (108/110)).

Regarding claim 2, Berube et al. discloses a high frequency application apparatus set forth in claim 1 characterized by an air cushion which within the part of the length of the cable in which the lines extend parallel is arranged between the lines within the cable (view figure 2, column 10, lines 41-45). Air separates the two wires in figure 2.

Regarding claim 3, Berube et al. discloses a high frequency application apparatus as set forth in claim 1 characterized in that the lines extend separately at the end of the cable towards the generator (view figure 1 (26); column 3, lines 46-48)). Berube does not explicitly show the lines separated, however the wires would have to split in order for the connector to work with the generator when connected.

Regarding claim 6, Berube et al. discloses a high frequency application apparatus characterized in that the lines extend in mutually coaxial relationship (column, 4 lines 34-40).

Regarding claim 7, Berube et al. discloses a high frequency application apparatus characterized in that the probe arrangement includes an electrode needle (view figure 9). The device described by Berube et al. performs like that of a needle electrode

Regarding claim 8, Berube et al. discloses a high frequency application apparatus as set forth in claim 6 characterized in that the electrode needle includes at least two active electrodes (view figure 2, 102/104).

5. **Regarding claim 12**, Berube et al. discloses a high frequency application apparatus characterized in that the cable is provided with an electrically conductive shield or casing (column 4, lines 33-49).

Regarding claim 13, Berube et al. discloses a high frequency application apparatus characterized in that the shield or the casing includes a connection by way of which it is to be electrically connected to a shielding means of a nuclear magnetic resonance tomograph (column 4, lines 45-49).

Regarding claim 21, Berube et al discloses a high frequency application apparatus characterized in that the probe arrangement and the cable are adapted to be re-sterilizable (column 4, lines 43 -45).

Claim Rejections - 35 USC § 103

Art Unit: 4185

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 4-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Berube et al. (US 6,471,696 B1) in view of Baumgartner et al. (3,809,846).

Regarding claim 4, Berube et al. discloses a high frequency application apparatus (view figure 2) but fails to disclose a line includes a plurality of wires.

However, Baumgartner et al. discloses a line including a plurality of wires (column 2, lines 67-68; column 3, lines 1-4).

8. It would have been obvious to one having ordinary skill in the art at the time of invention to exchange one type of line disclosed by Berube with the line having a plurality of wires disclosed by Baumgartner. Doing so would decrease the interference between the wires.

Regarding claim 5, Berube et al discloses a high frequency application apparatus (view figure 2), but fails to disclose the lines and/or the wires are twisted together.

However, Baumgartner discloses the lines and/or lines are twisted together (column 2, lines 67-68; column 3, lines 1-4).

9. It would have been obvious to one having ordinary skill in the art at the time of invention to exchange one type of line disclosed by Berube with the line having the lines

and/or wires twisted together disclosed by Baumgartner. Doing so would decrease the interference between the wires.

10. **Claims 9-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Berube et al. (US 6,471,696 B1) in view of Lorentzen (US 5,951,546).

Regarding claim 9, Berube et al. discloses a high frequency application apparatus (view figure 2) but fails to disclose the probe arrangement includes an electrode needle and a neutral electrode to be applied externally to the body.

However, Lorentzen discloses the probe arrangement includes an electrode needle and a neutral electrode to be applied externally to the body (column 10, lines 41-56).

11. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the probe arrangement includes an electrode needle and a neutral electrode to be applied externally to the body taught by Lorentzen. Doing so allows for an easier insertion into the target tissue.

Regarding claim 10, Berube et al. discloses a high frequency application apparatus (view figure 2) but fails to disclose the electrode needle includes at least one active electrode.

However, Lorentzen discloses the probe the electrode needle includes at least one active electrode (column 10, lines 41-56).

12. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the electrode needle

includes at least one active electrode by Lorentzen. Doing so allows for an easier insertion into the target tissue.

13. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Berube et al (US 6,471,696 B1) in view of Sommer (US 4,972,459).

Regarding claim 11, Berube et al discloses a high frequency application apparatus (view figure 2) but fails to disclose a ferromagnetic ring is mounted on the cable.

However, Sommer discloses a ferromagnetic material that surrounds the cable, this material that surrounds the cable acts as a ferromagnetic ring mounted on the cable.

14. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the ferromagnetic material surrounding the cable taught by Sommer. Doing so helps to reduce the noise and any interference generated by high frequency generators.

15. **Claims 15, 23, 25, and 27-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Berube et al. (US 6,471,696 B1) in view of D' Amelio et al. (US 4,823,791).

Regarding claim 15, Berube et al. discloses a high frequency application apparatus wherein the lines have a portion towards the generator and a portion towards the probe(view figure 2), but fails to disclose between which is a switching device for separating and connecting the generator-end portion and the probe-end portion.

However, D' Amelio et al. discloses a switching device for separating and connecting the generator-end portion and the probe-end portion (column 15, lines 52-54).

16. It would have been obvious to one having ordinary skill in the art to combine the high frequency apparatus having lines toward the generator and towards the probe taught by Berube et al. with the switching device taught by D' Amelio. Doing so would allow the operator to control the energy directed to the probe by a simple switch.

Regarding claim 23, Berube et al. discloses a high frequency application apparatus (view figure 2), but fails to disclose the switching device includes an electrical switch.

However D' Amelio discloses a switching device (column 15, lines 52-54). It is inherent that a switch can turn on/off power. Any switching device could be used.

17. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the switching device taught by D' Amelio. Doing so would allow the operator to control the energy directed to the probe by a simple switch.

Regarding claim 25, Berube et al discloses a high frequency application apparatus (view figure 2), but fails to disclose the electrical switch is a reed relay.

However, D'Amelio discloses a switching device (column 15, lines 52-54). It is inherent that a switch can turn on/off power. Any switching device could be used.

18. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the switching device taught

by D' Amelio. Doing so would allow the operator to control the energy directed to the probe by a simple switch.

Regarding claim 27, Berube et al discloses a high frequency application apparatus (view figure 2) but fails to disclose the switching device includes a mechanical switch.

However, D' Amelio discloses a switching device (column 15, lines 52-54). It is inherent that a switch can turn on/off power. Any switching device could be used.

19. It would have been obvious to one having ordinary skill in the art to combine the high frequency application apparatus taught by Berube with the switching device taught by D' Amelio. Doing so would allow the operator to control the energy directed to the probe by a simple switch.

Regarding claim 28, Berube et al. discloses a high frequency application apparatus (view figure 2) but fails to disclose the switching device includes a signal line and an actuating switch which are of such an arrangement and configuration that separation and connection can take place in the room in which the high frequency generator is disposed.

However, D'Amelio discloses the switching device includes a signal line and an actuating switch which are of such an arrangement and configuration that separation and connection can take place in the room in which the high frequency generator is disposed(column 14, lines 31-32; column 15, lines 52-54)).

20. It would have been obvious to one having ordinary skill in the art at the time of invention to combine the high frequency application apparatus taught by Berube with

the switching device includes a signal line and an actuating switch which are of such an arrangement and configuration that separation and connection can take place in the room in which the high frequency generator is disposed taught by D'Amelio. Doing so would allow the apparatus to operate near the magnetic resonance machine, which is a typical set up when dealing with magnetic resonance.

21. **Claim 30** is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Amelio (US 4,823,791)

Regarding claim 30, D'Amelio discloses a high frequency application apparatus but fails to explicitly disclose that the probe arrangement and the cable are adapted to be re-sterilizable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the probe and cable be re-sterilizable, since equipment that is reused in medical procedures needs to be sterilized.

22. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Amelio (US 4,83,791) in view of Osakada et al (US 6,308,239 B1).

Regarding claim 20, D' Amelio discloses a high frequency application apparatus (column 8, lines 9-34) but fails to disclose the switching device includes an interface for the connection of a control line to a nuclear magnetic resonance tomograph.

However, Osakada et al. discloses a switching device includes an interface for the connection of a control line to a nuclear magnetic resonance tomograph (column 11, lines 55-63).

23. It would have been obvious to one having ordinary skill in the art at the time of invention to combine the high frequency application apparatus taught by D'Amelio with

the switching device disclosed by Osakada. Doing so would allow the switching device to control the energizing of the probe in accordance with when the magnetic resonance machine is used.

24. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over Berube et al (US 6,471,239 B1) in view of Osakada et al. (US 6,308,239 B1).

Regarding claim 29, Berube et al discloses a high frequency application apparatus (view figure 2) but fails to disclose the switching device includes an interface for the connection of a control line to a nuclear magnetic resonance tomograph.

However, Osakada et al. discloses a switching device includes an interface for the connection of a control line to a nuclear magnetic resonance tomograph (column 11, lines 55-63).

25. It would have been obvious to one having ordinary skill in the art at the time of invention to combine the high frequency application apparatus taught by Berube with the switching device disclosed by Osakada. Doing so would allow the switching device to control the energizing of the probe in accordance with when the magnetic resonance machine is used.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are cited for disclosing related limitations of the applicant's claimed and disclosed invention: **Gentry et al. (US 4,488,125 A); Pless et al. (US 4,640,298); Lennox et al. (EP 1002501 A1); Garlto et al. (EP 1050279 A1); Hareyama et al (US 7,164,940).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMANDA SCOTT whose telephone number is (571)270-7103. The examiner can normally be reached on Monday thru Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrell McKinnon can be reached on (571)272-4797. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AMANDA SCOTT/
Examiner, Art Unit 4185

/Terrell L McKinnon/

Supervisory Patent Examiner, Art Unit 4185